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Agency Secretary

Air Resources Board

Robert F. Sawyer, Ph.D., Chair
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Arnold Schwarzenegger
Governor

February 9, 2006

Mr. Frank DePetrillo
General Manager
Rypos, Inc.
260 Hopping Brook Road
Holliston, Massachusetts 01746

Dear Mr. DePetrillo:

The Air Resources Board (ARB) staff has reviewed the Rypos Verification Report for the Rypos ADPF diesel particulate filter. Based on the evaluation of the data provided, ARB hereby verifies that the Rypos ADPF filter reduces emissions of diesel particulate matter (PM) by 50 percent or greater in stationary emergency standby generators with engines listed in the enclosure labeled, Attachment 1. Additionally, ARB hereby conditionally verifies that the Rypos ADPF filter reduces emissions of diesel particulate matter (PM) by 50 percent or greater for use in stationary emergency standby pumps with engines listed in the enclosure labeled, Attachment 1. The Rypos ADPF filter is therefore verified as a Level 2 diesel emission control device for stationary emergency standby generators and conditionally verified a Level 2 diesel emission control device for stationary emergency standby pumps when used on diesel engines certified to Tier 1, 2, or 3 PM emission rate, subject to the terms and conditions specified below.

The required emissions and durability testing of the Rypos ADPF filter were performed per the testing protocol "Rypos TrapTM Verification Proposal" submitted to ARB on October 6, 2004. The system has completed all required durability testing for stationary emergency standby generators, with positive results, making the system eligible for verification. The Rypos ADPF filter is conditionally verified for stationary emergency standby pumps. As discussed below, the full verification approval process for pumps requires completion of additional field durability testing.

The verification test program for the Rypos ADPF filter consists of:

- A. Baseline Emissions Testing
- B. Zero-hour Control Device Emissions Testing
- C. Durability Testing (0 - 500 hr)
- D. Post 500 hr Verification Emission Test
- E. Field Test on a Diesel Powered Pump

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Website: <http://www.arb.ca.gov>.

California Environmental Protection Agency

Testing has been completed for the emergency standby generator verification and pump conditional verification. Because all durability and testing were conducted on diesel powered generators, an additional field test on an emergency standby pump must be conducted to obtain full verification for stationary emergency standby pumps. This field test entails an additional 30 days of field operation on a diesel-fueled pump including 12 maintenance runs and two separate 4 hour sessions with the engine operating under load, allowing engine cool down between runs. The additional field operation must be completed within three years after receiving conditional verification (Section 2705: Field Demonstration Requirements (b) (2)). When the additional field operation is successfully completed, an extension to the Executive Order for the full verification on pumps can be provided. The conditional verification for pumps is equivalent to verification for the purpose of satisfying the requirements of in-use emission control regulations. If these conditions of verification are not satisfied by the aforementioned time period, the pump conditional verification will automatically terminate.

The stationary emergency standby generator verification and emergency standby pump conditional verification is valid provided the following operating criteria are met:

Parameter	Value
Application	Stationary Emergency Standby Power Generation or Pumping
Engine Type	Diesel, with or without turbocharger, certified to 0.4 g/bhp-hr or less of PM
Minimum Exhaust Temperature for Filter Regeneration	Not Applicable (NA). Active DPF
Maximum consecutive minutes at idle	NA
Number of Cold Start and 30 Minute Idle Sessions before Regeneration Required	NA
Number of Hours of Operation Before Cleaning of Filter Required	NA
Fuel	Diesel fuel with 500 ppm sulfur content limit. Biodiesel is not acceptable for this verification.
PM Verification Level	Level 2 Verification: At least 50% reduction of PM.

Since there may be significant variations from application to application, Rypos will review actual operating conditions (duty cycle, baseline emissions, exhaust temperature profiles, and engine backpressure) prior to retrofitting an engine with a Rypos ADPF filter to ensure compatibility.

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Furthermore, the engine should be well maintained and not consume lubricating oil at a rate greater than that specified by the engine manufacturer.

The ARB hereby assigns the Rypos ADPF filter the designated family name of:

CA/RYP/2005/PM2/N00/ST/DPF01

This identification number should be used in reference to this generator verification and pump conditional verification as part of the system labeling requirement. Additionally, as stated in the Diesel Emission Control Strategy Verification Procedure, Rypos is responsible for honoring their warranty (Section 2707) and conducting in-use compliance testing (Section 2709).

Should you have any questions or comments, please contact Mr. John Lee, Air Resources Engineer, at (916) 327-5975.

Sincerely,

/s/

Daniel E. Donohoue, Chief
Emission Assessment Branch
Stationary Source Division

Attachment

cc: John Lee
Air Resources Engineer
Technical Analysis Section